THREAT LEVEL DETERMINATION THROUGH ELEMENTAL ANALYSIS

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Abstract

Recent events in Madrid and London have once again focused attention on the problem of threat detection using elemental analysis. Our research is re-examining the basic principle that explosive threats can be detected through the measurement of four principle elements: H, C, N, and O. Many of the detection systems which use elemental analysis, rely strongly on the detection and quantification of elemental N. Our studies have found this to be insufficient as a conclusive means of threat discrimination. We have created new functions using the four elements which appear to more clearly differentiate the explosives from innocuous materials.

Category

Session: *General Physics*